DOCUMENT RESUME

ED 410 187 SP 037 393

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TITLE Teacher Stress: A Review of the International Literature.
PUB DATE [97]
NOTE 22p.
PUB TYPE Information Analyses (070)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Faculty; Coping; Elementary School Teachers; Elementary Secondary Education; Foreign Countries; Higher Education; Literature Reviews; *Organizational Climate; Secondary School Teachers; *Stress Management; *Stress Variables; Teacher Burnout; *Teacher Characteristics; Teacher Morale; *Teaching Conditions

ABSTRACT

This paper summarizes research on both organizational and individual characteristics positively correlated to teacher stress. Organizational characteristics are time constraints, workload, job demands, role conflict, role ambiguity, income, resources, class size, administrative bureaucracy, autonomy/participation in decision making, collegiality, student discipline and interaction, reward and recognition, and career advancement. Individual characteristics are age, marital status, and gender. Teachers found stress increased by time factors, workloads, role conflict and ambiguity, inadequate income and resources, low autonomy, and issues related to the classroom environment. Individual characteristics contributing to stress included age, experience, gender, and marital status. Recommendations for administrators and teachers include: wider knowledge of the organizational and individual characteristics to help school systems and administrators develop systemic interventions to alleviate teacher stress; and greater teacher awareness of stress factors, which will lead teachers to have greater compassion for themselves, resulting in enhanced coping effectiveness. (Contains 65 references.) (JLS)

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TEACHER STRESS: A REVIEW OF THE INTERNATIONAL LITERATURE

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TEACHER STRESS: A REVIEW OF THE INTERNATIONAL LITERATURE

ABSTRACT

This article is a review of the international literature on teacher stress. The article summarizes the research on both organizational characteristics (time constraints, workload, job demands, role conflict and/or role ambiguity, income, resources, class size, administrative bureaucracy, autonomy/participation in decision making, collegiality, student discipline and interaction, reward and recognition, career advancement) and individual characteristics (age, marital status, gender) positively correlated with teacher stress. Each characteristic section is followed by a brief summary. The article concludes with an overall summary of the research on organizational and individual stress-related characteristics as well as recommendations for administrators and teachers.

Researchers believe that stress or burnout may be especially prevalent among human service professions, particularly the teaching profession (Kalker, 1984; Kryiacou & Sutcliffe, 1977, 1978; Pettegrew & Wolf, 1982). While most teacher stress research has focused on the United States, Britain, and Canada, international studies on teacher stress has increased (Kyriacou, 1987) in countries such as: Australia (Smith & Bourke, 1992), Finland (Kinnuen, 1988), Israel (Gaziel, 1993; Perlberg & Keinan, 1988), Japan (Hyodo, 1992; Smith, 1987), New Zealand (Dewe, 1986; Manthei & Gilmore, 1994), Nigeria (Okebukola & Jegede, 1992), Taiwan (Chang & Goldman, 1990; Chen, Miller, Cooper, & Wilson, 1995; Kuo, 1989; Tsai, 1992), and Zimbabwe (Wilson & Mutero, 1989). The following review of literature will examine characteristics positively correlated with teacher stress.

Organizational Characteristics

Time Constraints

Elementary through Secondary School Teachers. McGrath, Houghton, and Reid (1989) administered the General Health Questionnaire and the Maslach Burnout Inventory (MBI) to 168 Northern Ireland teachers and found 63% reported moderate/high stress levels due to time constraints. In a study of 238 Australian elementary and secondary school teachers, O'Connor and Clarke (1990) discovered tension between teachers and administrators with regard to time, workload, and student factors. In the United States, Raschke, Dedrick, Strathe, and Hawkes (1985) administered a questionnaire survey to 230 K-6 midwestern public school teachers: lack of time was the greatest impediment to job satisfaction. Similarly, Trendall (1989) administered 337 questionnaires to primary, secondary, and special British school teachers and found lack of time was ranked as the number one stressor.

University Faculty. Perlberg and Keinan (1988) administered the Faculty Stress Index (Gmelch, Wilke, & Lovrich, 1986) to 100 faculty from Israeli universities and showed faculty reporting stress due to insufficient time to remain professionally current. Gmelch, et al., (1986) administered the Faculty Stress Index (FSI) to 1,221 American faculty from 40 public and 40 private universities and indicated time constraints was one of five main stress factors.

Brown, Bond, Gerndt, Krager, Krantz, Lukin, and Prentice (1986) administered response scales to 191 faculty and to 67 student affairs staff of a midwestern state university and their results showed "lack of time" or "too much to do with little time" was the most frequently listed source of stress. When Sorcinelli (1985) employed in-depth interviews and questionnaires with 112 Indiana University faculty, lack of time was one of the critical obstacles to career development, due to teaching, research and service demands. Gmelch and Burns (1991) administered the Department Chair Stress Index to 564 chairpersons from 101 U.S. universities: the task-based nature of chairpersons' jobs resulted in heavy workloads and time constraints.

The previous studies indicate support for the following statements regarding time constraints:

1. Lack of time to perform one's task is positively correlated with emotional exhaustion and job satisfaction.
2. Teachers at all levels find time constraints to be a significant source of stress.
3. Chairpersons of university departments also feel the stress of time constraints.

Workload

Kindergarten through Secondary School Teachers. Friesen and Williams (1985) administered the item Organizational Stress Questionnaire to 759 Canadian teachers and discovered workload was one of five dominant stress factors. Farber (1984) administered the Teacher Attitude Survey (TAS) to 236 K-12 New York public school teachers, who reported heavy workloads due to excessive paperwork and unsuccessful administrative meetings. Also, Litt and Turk (1985), who administered a questionnaire to 291 American high school teachers, found that too much paperwork was one of the three specific job tensions. Reyes and Imber (1992) studied 472 midwestern teachers with three self-administered questionnaires; teachers who perceived their workload as fair had the highest levels of morale, commitment, and satisfaction.

University Faculty. Hunter, Crow, Beach, and Ventimiglia (1983) administered a questionnaire to 480 U.S. faculty and 113 Canadian or British Isles faculty: they reported feeling overworked. Gmelch and Burns, (1991)

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administered the Department Chair Stress Index to 564 chairpersons from 101 American institutions who also reported heavy workloads.

The studies discussed above suggest:

1. Workload seems to be a salient source of stress for teachers at all levels.
2. Excessive paperwork contributes significantly to teachers' heavy workload.
3. Work overload correlates strongly with time constraints.
4. Perceived unfair distribution of workload affects teachers' morale, commitment and job satisfaction.
5. Department chairs of higher education seem to be stressed by heavy workload.

Job Demands

Elementary through Secondary School Teachers. Okebukola and Jegede (1992) administered the Science Teacher Stress Inventory to 206 Nigerian science teachers and found job demands ranked second among five stressors. They also found job demands often exceeded the teacher's competency which caused stress.

University Faculty. Happ and Yoder (1991) administered a survey questionnaire to 200 full-time faculty of the 14 Pennsylvania two-year community colleges. The results indicated non-tenured faculty had significantly higher job demand stress levels than did tenured faculty and female faculty expressed a slightly higher level of job demand stress than their male counterparts. Gmelch et al., (1986) also found job demands was one of the ten most stressful situations in American academia.

The previous studies indicate support for the following statements regarding job demands:

1. Job demands were related to work overload and time constraints.
2. Job demands often exceed the individual teacher's competency, and expectations are likely to cause stress.
3. Non-tenured faculty (male and female) and female faculty have higher job demand stress.
4. For college professors, the characteristic of job demands is one of ten stressful situations.

Role Conflict and/or Role Ambiguity

Elementary through Secondary School Teachers. Bacharach, Bauer, and Conley (1986) studied the relationship of role ambiguity and stress by surveying 2,247 New York elementary and secondary teachers and found the presence of role ambiguity leads to stress. Schwab, Jackson and Schuler (1986) conducted a study of 339 American teachers which indicated role conflict was significantly related to emotional exhaustion and depersonalization. Litt and Turk (1985) administered a questionnaire to 291 full-time, Connecticut public classroom high school teachers: the role teachers perceived for themselves and the school climate, particularly the relationship with supervisors, contributed greatly to distress and dissatisfaction.

University Faculty. Singleton (1987) gave 46 educational administration department chairpersons a questionnaire; role conflict correlated with decreased job satisfaction and increased anxiety, and role ambiguity was significantly related with low job satisfaction, increased tension and anxiety, and a propensity to leave an administrative position. These findings correspond with the study done by Knutton and Mycroft (1986) in which English deputies found that being in the middle, lacking role clarity, and feeling conflict between role demands contributed to their stress.

The studies discussed in this section suggest:

1. Elementary and secondary school teachers find role conflict and ambiguity lead to stress.
2. Role conflict and ambiguity are sources of stress for administrators.

Income

Elementary through Secondary School Teachers. Tokar and Feitler (1986) administered a questionnaire to 773 Ohio and Pennsylvania middle school teachers and results indicated that inadequate salary was a significant source of stress. Dworkin, Haney, and Telschow (1988) used a stress questionnaire with 291 Houston elementary, junior high, and senior high public school teachers and determined that the highest levels of stress were associated with salary and

benefits. Vance, Nutter, and Humphreys (1989) administered the Teacher Stress Inventory to 30 full-time East Tennessee State University laboratory school teachers and found inadequate salary was among the strongest sources of stress identified. Farber's (1984) study with 365 New York elementary and secondary public school teachers indicated that 73.1% of the teachers never or rarely felt that their salaries were commensurate with their work. Litt and Turk (1985) found that specific problems such as inadequate salary and low status of the teaching profession were identified as sources of distress for American public high school teachers and were linked with the intention to leave the profession. Additional studies report inadequate salary and benefits create poor working conditions and stressful experiences for teachers (Fong & Lin, 1994; McGath et al., 1989; Milstein, Golaszewski, & Duquette, 1984; Stile, Wright, Davis, Moore, Templeman, Toews, & Wilson, 1987).

The studies discussed in this section regarding teachers' income suggest:

1. Teachers (elementary through secondary) feel more stress in terms of inadequate salary.
2. Inadequate salary contributes to poor working conditions for teachers.

Resources

Kindergarten through Secondary School Teachers. Milstein et al., (1984) administered a questionnaire to 130 K-8 elementary American school teachers and found lack of job materials was the most stressful factor. Also, McGrath et al. (1989) reported rationing of scarce services or resources was the most commonly cited stressor for teachers in Northern Ireland, and Trendall (1989) indicated that dissatisfaction of British teachers was in relation to organizational inadequacies. Okebukola and Jegede (1992) discovered Nigerian science teachers regarded difficulty in obtaining teaching equipment as their most stressful factor.

University Faculty. Sorcinelli and Billings (1992) administered The New Faculty Career Questionnaire to a cohort of 19 first-year faculty and interviewed 20 new faculty who entered tenure-track positions at the assistant and associate professor level. Interviews revealed that pretenure faculty attributed their stress to a budget crisis. With

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regard to securing financial support for research and inadequate facilities, both American academicians (Gmelch et al., 1986) and Israeli academicians (Perlberg & Keinan, 1988) reported that they were serious sources of stress.

The previous studies indicate support for the following statements regarding insufficient resources:

1. Inadequate resources for both teachers and professors is a serious stress factor.
2. For elementary/secondary teachers, inadequate resources refers to books, supplies and teaching equipment.
3. For professors, inadequate resources refers to research and teaching resources.

Class Size

Elementary through Secondary School Teachers. Class size has emerged as one of the most frequently mentioned environmental stressors in studies using self-report methods (Bacharach, et al., 1986; Sandholtz, 1990). In a recent study, French (1993) examined 223 Colorado elementary teachers' perceptions of class size; they reported greater stress associated with class size than teachers in schools with lower pupil-teacher ratios. Trendall (1989) also found class size ranked high as a stressor (second out of twenty) for British teachers.

The studies discussed above with regard to class size suggest:

1. Class size is a source of stress for elementary and secondary school teachers.

Administrative Bureaucracy

Elementary School Teachers. Brissie, Hoover-Dempsey, and Bassler (1988) gave the Teacher Information Questionnaire, the School Information Questionnaire, and the Teacher Opinion Questionnaire to 1,213 midsouthern, American, elementary teachers; results indicated that organizational rigidity correlated with burnout. This finding supports that of Bacharach et al. (1986) who suggested that elementary school bureaucracy may manifest itself in work processes such as high routinization and formalization of work and lead to high levels of reported stress.

The studies concerning bureaucracy previously discussed suggest:

1. Bureaucracy is related with burnout and high levels of reported stress.

Autonomy/Participation in Decision Making

Elementary through Secondary School Teachers. Rigid administration or organization generally allows little participation and usually responds only minimally to individual attempts to participate (Brissie et al. 1988). Bacharach et al. (1986) revealed that decisional deprivation in regard to influence had a strong effect on stress among elementary teachers, and McGrath et al. (1989) and Schwab et al. (1986) found that lack of participation in decision making and little autonomy were significantly related to burnout. Smith (1987) administered a questionnaire to 143 Japanese and 386 Michigan high school teachers and the only item contributing to stress for Japanese teachers was the lack of opportunity to develop new programs and practices. Dewe (1986) administered 800 questionnaires to primary school teachers in Northern Ireland and found that having little individual control over different school events was the first factor contributing to teacher stress.

The discussion in this section with regard to autonomy suggests:

1. Deprivation of participation in decision making results in job related stress and burnout.

Collegiality

Elementary through Secondary Teachers: Peer Relationships. Cecil and Forman (1990) used a stress questionnaire with 54 elementary and middle school teacher volunteers in southeastern American: lacking peer support was one of the four components causing stress. Lack of collegial relationships, teacher cohesiveness, friendly and harmonious relations, a sense of school community, and satisfactory relationships have also been reported as major factors contributing to work-related stress (Brown et al., 1986; Farber, 1984; Friesen & Williams, 1985; Harris, Halpin, & Halpin, 1985; Litt & Turk, 1985; Milstein et al., 1984; Raschke et al., 1985) which correlated with teacher burnout (Brissie et al. 1988). Moreover, McGrath et al. (1989) pointed out that one-third of the teachers participants felt that support and appreciation from senior staff would help alleviate stress.

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Elementary through Secondary Teachers: Teacher-Administrator Relationships. O'Connor and Clark, (1990) administered a questionnaire to 238 Australian teachers enrolled in off-campus postgraduate education courses from Deaking University: problems with school administration and staff tensions were the third highest level of stress. Using the Job Related Tension Scale with 291 high school teachers, Litt and Turk (1985) stated that the quality of American teachers' relationship with supervisors was associated with stress, and unhappiness with the principal contributed greatly to teacher's general distress and dissatisfaction and was ultimately linked to leaving the profession.

The discussion in this section indicates support for the following statements regarding collegiality:

1. Lack of collegial relationships is a source of stress for elementary and secondary teachers.
2. Lack of collegial relationships with administrators is also stressful for teachers.

Student Discipline and Interaction

Elementary through Secondary Teachers. Payne and Furnham (1987) administered a questionnaire to 444 secondary Barbados school teachers. Their results indicated secondary school teachers perceived the instructional management demands of classroom life to be the most stressful aspects of their work. McCormick and Solman (1992) administered a questionnaire to 387 Australian teachers and found student domain was a significant stress factor. Greenlee and Ogletree (1993) administered the Questionnaire on Teachers' Attitudes Toward Discipline Problems and Classroom Management Strategies to 50 elementary and secondary Chicago school teachers: 39 respondents believed classroom management stress is the most influential factor in the failure of novice teachers.

University Faculty. Gmelch et al. (1986) reported that student discipline and interaction related to faculty stress in terms of instructing, evaluating, teaching and advising inadequately prepared students, and resolving differences with students.

The studies discussed in this section support the following statements:

1. Student discipline and interactions are particularly stressful problems for elementary and secondary teachers.
2. Classroom management is particularly stressful for novice teachers.
3. For professors, student discipline stress is related to instructing, evaluating, teaching, and advising.

Reward and Recognition

Kindergarten through Secondary School Teachers: Extrinsic Rewards.

Jenkins and Calhoun (1991) administered a questionnaire to 124 Georgia public school teachers of grades K-12 and found the third highest stressor was inadequate rewards. Fimian and Santoro (1983) administered the Teacher Stress Inventory to 365 full-time, Connecticut special education teachers: teachers felt that they lacked recognition, promotion, and advancement opportunities. The importance for the administrators or superiors to recognize teachers' good work or effort is consistent with studies done by Bredeson, Fruth, and Kasten (1983) and Wangberg, Metzger, and Levitov (1982).

Secondary Teachers: Intrinsic Rewards. Blase (1982) interviewed and administered questionnaires to 43 New York high school teachers and found the absence of either extrinsic or intrinsic rewards over extended periods of time resulted in varying degrees of physical, emotional, and attitudinal entropy concerning work. This finding corresponds with that of Bredeson et al.(1983) and Raschke et al.(1985) whose studies indicated that student success, as in learning activities, were positive psychic rewards for teachers and that teachers derived their primary job satisfaction from the intrinsic benefits that accrue from working with children. Similarly, Sandholtz (1990) conducted cases studies of four high school departments with an experienced teaching faculty: the most important rewards which emerged for teachers were their interaction with students and students' progress.

University Faculty. Hill (1986-87) administered a job satisfaction inventory to 1089 full-time faculty in 20 Pennsylvania campuses and found intrinsic factors were significantly higher than that of extrinsic factors. Gmelch et

al. (1986) also found lack of reward and recognition was a perceived stressful condition for the faculty.

The studies presented in this section support the following:

1. For teachers at all levels, lacking rewards and recognition creates stress.
2. Both extrinsic and intrinsic rewards are critical and equally important to sustaining teachers.
3. Psychic or intrinsic rewards seem to be valued more by teachers at all levels.

Career Advancement

Elementary and Secondary School Teachers. Teachers appear concerned about their career advancement (Farber, 1984; Fimian & Santoro, 1983) and blocks in this process appear related to teacher stress (Bacharach et al., 1986; Milstein et al., 1984) causing teachers to think about leaving the teaching profession (Litt & Turk, 1985). Bredeson et al. (1983) interviewed 30 classroom teachers, 20 former teachers, and 10 administrators from a midwestern city: results showed lack of career growth opportunity was considered a frustration.

University Faculty. Chronister, Baldwin, & Bailey (1991) examined the responses of the professorate studied in the 1989 Carnegie Foundation survey: 832 untenured, tenure track faculty and 183 nontenure track faculty. The researchers found nontenure track faculty expressed less optimism about future career advancement in higher education, and nontenure track faculty expressed feelings of being trapped in a profession with limited opportunities for advancement. Also, Patterson, Sutton, and Schuttenberg (1987) used a Faculty Career Survey to study 387 college of education faculty and showed that the full professors perceived themselves less likely to obtain either a promotion or a desirable transfer than did associate or assistant professors.

These studies of career advancement support the following statements:

1. Limited opportunities for professional growth for elementary and secondary school teachers cause stress.
2. Non-tenured faculty feel less optimistic about career advancement.
3. Full and tenured professors experience stress when they perceive themselves as not advancing.

Individual Characteristics

Age

The youngest and least experienced teachers found parental problems stressful (DeFrank & Stroup, 1989), reported more school stress (Trendall, 1989), and felt more burnout and less commitment to teaching (Farber, 1984). Calabrese and Anderson (1986) administered the Beasley Stress Scale and the Dean Alienation Scale to 76 American, midwestern teachers and showed the younger, more inexperienced teachers had higher levels of total alienation and felt a stronger sense of normlessness and powerlessness.

University Faculty. Fong and Lin (1994) administered a questionnaire to 1,310 five- and two-year junior college teachers in Taiwan: younger junior college teachers were more prone to feelings of burnout and depersonalization than junior college veteran teachers. Chen et al. (1995) also reported higher feelings of stress among younger Taiwanese junior college teachers.

The studies previously discussed indicate the following support regarding relations of teacher stress and age:

1. Younger and less experienced teachers experience more job stress.
2. Younger and inexperienced teachers tend to feel more alienated and powerless.
3. Younger junior college teachers seem to experience higher burnout, depersonalization, and stress.

Marital Status

Elementary School Teachers. DeFrank and Stroup (1989) administered a questionnaire to 245 Texas elementary school teachers and found single teachers were most concerned with placement issues and student problems.

University Faculty. Fong and Amatea (1992) administered the Life Role Development Questionnaire to 141 academic women at a major southeastern American university: single professional women had significantly higher levels of stress symptoms than married women parents. This finding is consistent with Fong and Lin's (1994) study where single Taiwanese junior college teachers experienced more burnout (emotional exhaustion, depersonalization,

and feelings of lack of accomplishment) than their married Taiwanese teacher counterparts and also with Chen et al.'s study (1995) where single, female Taiwanese junior college teachers reported the most stress.

The studies previously discussed indicate the following support concerning teachers' stress and marital stress.

1. Single teachers seem to feel more stress when dealing with placement issues and student problems.
2. Single faculty experience higher levels of stress and burnout than married faculty.

Gender

Elementary through Secondary School Teachers. There were contradictory findings with regard to teaching satisfaction among teachers at the elementary school level. Wangberg et al. (1982) administered a questionnaire to 225 American female elementary teachers and reported that 40 percent of women teachers expressed a significant amount of job dissatisfaction. However, Belasco and Alutto (1972) administered a questionnaire to 427 American elementary and secondary teachers and reported that females teaching at the elementary level were more satisfied professionally than secondary teachers. McCormick and Solman (1992) administered a questionnaire to 387 infant/primary and secondary teachers and found female teachers were significantly more satisfied with their income than male teachers.

University Faculty. Huber, Seybolt, & Venemon (1992) administered a questionnaire to 301 American male and female faculty members: female faculty were more satisfied with pay raises and benefits than male faculty. Dey (1994) examined the 1989-90 Higher Education Research Institute Survey results of full-time college faculty and administrators at 400 U.S. colleges and universities and found women faculty were more likely than men to report their teaching load and managing household responsibilities as sources of extensive stress. Thoreson, Kardash, Leuthold, and Morrow (1990), administered a questionnaire to 35 female and 28 male American faculty: females reported more anxiety, stress, loneliness, and recurrent physical illness. Chen et al. (1995) also found Taiwanese female junior college faculty reported more stress, except in the area of income.

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The relationship between gender and job-related stress and their findings can be summarized as follows:

1. There are contradictory findings regarding job satisfaction and income with elementary/secondary teachers.
2. Female teachers and faculty undergo significantly higher levels of stress than male teachers.
3. Female faculty are more satisfied with pay raises and benefits and more likely to experience stress.

Summary

The review of the international literature indicates that teacher stress is impacted by both organizational and individual characteristics. Teachers found the following organizational factors increased their stress levels: tight time constraints (lack of time to perform tasks and keep current professionally), heavy workloads (excessive paperwork, unfair workloads, increased workloads for administrators), numerous job demands (related to time constraints and workload), high role conflict and ambiguity (conflicting roles), insufficient income, inadequate resources (supplies, research/teaching support), large class size, extensive administrative bureaucracy, low autonomy and low decision making participation, low collegiality, high student discipline and student interaction problems, low reward and recognition, and limited career advancement. Individual characteristics which correlated with teacher stress included: age (younger, less experienced), marital status (single teachers experience more stress), and gender (female teachers have more stress).

An awareness of these organizational and individual characteristics can increase understanding for teacher stress levels. Knowledge of these common stress characteristics can assist school systems and administrators in developing systemic interventions to alleviate teacher stress. Changing the system to reduce the presence of stress-related characteristics will inhibit the tendency to blame the individual teacher for not coping effectively with teacher stress. Also, the teachers themselves may be able to have more compassion for themselves, with regard to the stress they experience in their work, resulting in enhanced coping effectiveness.

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